



# **STIC Search Report**

## **Biotech-Chem Library**

**STIC Database Tracking Number: 114210**

**TO: Cybille Delacroix**  
**Location: REM4C70**  
**Art Unit: 1614**  
**Sunday, February 15, 2004**

**Case Serial Number: 10/038114**

**From: Mary Jane Ruhl**  
**Location: Biotech-Chem Library**  
**Remsen 1-B55**  
**Phone: 571-272-2524**

**maryjane.ruhl@uspto.gov**

### **Search Notes**

Examiner Delacroix,

Here are the results for your recent search request.

Please feel free to contact me if you have any questions about these results.

Thank you for using STIC services. We appreciate the opportunity to serve you.

Sincerely,

Mary Jane Ruhl  
Technical Information Specialist  
STIC  
CM-1, Rm. 6-A-06  
605-1155

114210/114385  
**SEARCH REQUEST FORM**

U.S. DEPARTMENT OF COMMERCE  
 Patent and Trademark Office

Requestor's  
 Name:

Delacroix

71100

Serial

Number:

101038,114

Date:

2-11-04

Phone:

571-272-0572

Art Unit:

1614

**Search Topic:**

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

Please search the attached compound  
 in a method for decreasing intraocular  
pressure or improving ocular accommodation.  
 involves treating patients with glaucoma.  
 key terms -> reduced accommodation.

Thank you  
 cm

RECEIVED  
 FEB 12 2004  
 (STIC)

**STAFF USE ONLY**

Date completed:

Searcher:

Terminal time:

Elapsed time:

CPU time:

Total time:

Number of Searches:

Number of Databases:

Search Site

STIC

CM-1

Pre-S

Type of Search

N.A. Sequence

A.A. Sequence

Structure

Bibliographic

Vendors

IG Suite

STN

Dialog

APS

Geninfo

SDC

DARC/Questel

Other

=> d his ful

FILE 'REGISTRY' ENTERED AT 18:47:46 ON 15 FEB 2004

E 3-CARBAMOYL-1-(4-METHOXY-BENZYL)-PYRIDINIUM CHLORIDE/CN

L1

STR

L2

1 SEA SSS SAM L1 - see & que stat, attached

FILE 'HCAPLUS' ENTERED AT 19:01:18 ON 15 FEB 2004

L3

1 SEA ABB=ON L2

I could locate only 1 compd., ~~and which~~ <sup>and it</sup> is not shown in CAS as the chloride. When I searched it in CA Plus, I retrieved only 1 citation which does not pertain to glaucoma. Inventor's search does not show the elected specie.

Pls. let me know if you need further work on this search.

Thank you,

Mary Jane Ruhl

X 22524

Chemical structure of 1,4-bis(2-methyl-4-oxo-1-pentylamino)pyrrolidine. The structure shows a central pyrrolidine ring (atoms 7-12) with two 2-methyl-4-oxo-1-pentylamino side chains attached at the 1 and 4 positions. The side chains are numbered 1-6 and 8-13 respectively. The methyl groups are labeled 15 and 14, and the carbonyl oxygen is labeled 18.

```
STEREO ATTRIBUTES: NONE
L2          1 SEA FILE=REGISTRY SSS SAM L1
L3          1 SEA FILE=HCAPLUS ABB=ON  L2
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=&gt; d ibib abs hitstr 13 1-1

L3 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1996:191937 HCAPLUS  
 DOCUMENT NUMBER: 124:316412  
 TITLE: Reactions of Charged Substrates. 4. The Gas-Phase  
 Dissociation of (4-Substituted  
 benzyl)dimethylsulfoniums and -pyridiniums  
 AUTHOR(S): Buckley, Neil; Maltby, David; Burlingame, Alma L.;  
 Oppenheimer, Norman J.  
 CORPORATE SOURCE: School of Pharmacy, University of California, San  
 Francisco, CA, 94143-0446, USA  
 SOURCE: Journal of Organic Chemistry (1996), 61(8), 2753-62  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The relative rates for the gas-phase dissociation  $RX^+ \rightarrow R^+ + X^\circ$   
 of five (4-Y-substituted benzyl)dimethylsulfoniums (Y = MeO, Me, H, Cl, and  
 NO<sub>2</sub>) and 24 (4-Y-substituted benzyl)-3'-Z-pyridiniums (complete series for  
 Z = CN, Cl, CONH<sub>2</sub>, and H, and 4-methoxy- and 4-nitrobenzyls for Z = F and  
 CH<sub>3</sub>CO) were measured using liquid secondary ion mass spectrometry. The  
 Hammett plot (vs  $\Delta G^\circ$  or  $\sigma^+$ ) is linear for the  
 sulfoniums, but plots for the four pyridinium series have a drastic break  
 between the 4-Cl and 4-NO<sub>2</sub> substrates. Broensted-like plots for the  
 pyridiniums show a strong leaving group effect only for 4-nitrobenzyls.  
 An anal. of these linear free energy relations with supporting evidence  
 from semiempirical computations suggests that collisionally activated  
 pyridinium substrates dissociate through two pathways, direct dissociation and

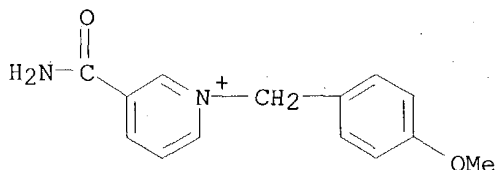
an ion-neutral complex intermediate. Comparison of these results with  
 results for the solution reactions of some of these compds. shows that the  
 mechanism is different in the gas and solution phases. Sufficient exptl.  
 data are not available to assign a mechanism for dissociation to the sulfonium  
 series, but computational results show characteristics of a direct  
 dissociative mechanism.

IT 175979-55-2

RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT  
 (Reactant); PROC (Process); RACT (Reactant or reagent)  
 (kinetics and mechanism of gas-phase dissociation of substituted  
 benzyldimethylsulfoniums and -pyridiniums)

RN 175979-55-2 HCAPLUS

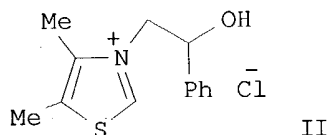
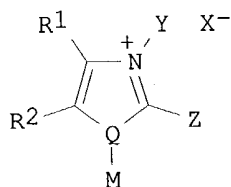
CN Pyridinium, 3-(aminocarbonyl)-1-[(4-methoxyphenyl)methyl]- (9CI) (CA  
 INDEX NAME)



=> d ibib abs hitstr l11 1-2

L11 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2002:521491 HCAPLUS  
 DOCUMENT NUMBER: 137:78956  
 TITLE: Synthesis of thiazolium and imidazolium salts and use  
 in treating **glaucoma**  
 INVENTOR(S): Egan, John J.; Wagle, Dilip; Vasan, Sara;  
 Gall, Martin; Bell, Stanley C.;  
 Lavoie, Edmond J.  
 PATENT ASSIGNEE(S): Alteon, Inc., USA  
 SOURCE: PCT Int. Appl., 83 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002053158	A1	20020711	WO 2001-US49550	20011228
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1353669	A1	20031022	EP 2001-988353	20011228
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			US 2000-259426P	P 20001229
			US 2001-296257P	P 20010606
			US 2001-307418P	P 20010724
			WO 2001-US49550	W 20011228
OTHER SOURCE(S):			MARPAT 137:78956	
GI				



AB Provided is a method of decreasing intraocular pressure or improving ocular accommodation comprising administering I [R1-2 = H, acylamino, acyloxyalkyl, alkanoyl, alkanoylalkyl, alkenyl, alkoxy, alkoxy carbonyl, etc.; Z = H, alkyl, Ar-CH2, NR3R4, etc.; R3-4 = H, alkyl, Ar, Ar-alkyl; Ar = (hetero)aryl; Y = amino, CHR5R6; R5 = H, alkyl, cycloalkyl, alkenyl, alkynyl, aminoalkyl, etc.; R6 = H, alk(en/yn)yl, cyano, aryl/heterocycle, etc.; Q = N, O, S; M is absent when Q = O, S; M = alkyl, vinyl, allyl, Y; X = pharmaceutically acceptable anion]. Examples include, 11 compds., effect of example compds. on outflow facility primates, drug penetration

studies on intact cornea (rabbit, monkey), effect of compds. on i.m. pilocarpine-stimulated accommodative response (monkey) and the ability of test compds. to inhibit crosslinking (and reverse already formed cross linking) of glycated serum albumin to rat tail tendon collagen (which prevent outflow). For instance, 2-Chloro-1-phenylethanol (preparation given) was used to alkylate 4,5-dimethylthiazole (neat, 135°, 28 h) to afford II (9.7%) as prisms, mp 201-203°. I are useful in the treatment/prevention of **glaucoma**.

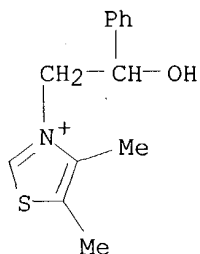
IT 356759-42-7P 356759-43-8P 356759-44-9P  
356759-45-0P 356759-46-1P 356759-47-2P  
356759-48-3P 356759-50-7P 356759-52-9P  
356759-53-0P 392710-36-0P 392710-37-1P  
392710-38-2P 393121-65-8P 393121-77-2P  
393121-80-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(**antiglaucoma** agent; synthesis of thiazolium and imidazolium salts as **antiglaucoma** agents)

RN 356759-42-7 HCAPLUS

CN Thiazolium, 3-(2-hydroxy-2-phenylethyl)-4,5-dimethyl-, chloride (9CI) (CA INDEX NAME)

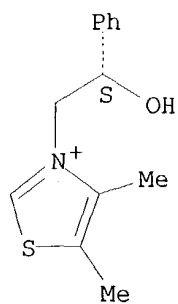


● Cl<sup>-</sup>

RN 356759-43-8 HCAPLUS

CN Thiazolium, 3-[(2S)-2-hydroxy-2-phenylethyl]-4,5-dimethyl-, chloride (9CI)  
(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

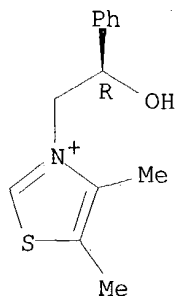


● Cl<sup>-</sup>

RN 356759-44-9 HCAPLUS

CN Thiazolium, 3-[(2R)-2-hydroxy-2-phenylethyl]-4,5-dimethyl-, chloride (9CI)  
(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

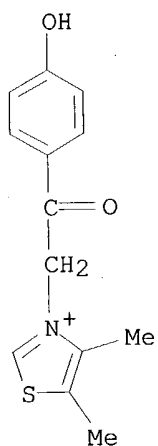


● Cl<sup>-</sup>

RN 356759-45-0 HCAPLUS

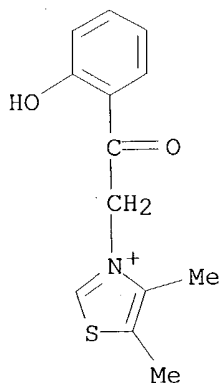
CN Thiazolium, 3-[2-(4-hydroxyphenyl)-2-oxoethyl]-4,5-dimethyl-, bromide  
(9CI) (CA INDEX NAME)





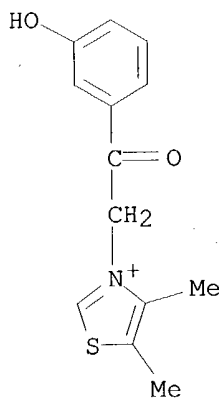
● Br<sup>-</sup>

RN 356759-46-1 HCAPLUS  
CN Thiazolium, 3-[2-(2-hydroxyphenyl)-2-oxoethyl]-4,5-dimethyl-, bromide  
(9CI) (CA INDEX NAME)

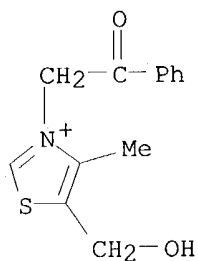


● Br<sup>-</sup>

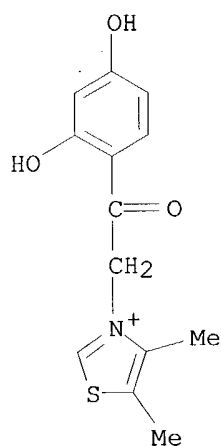
RN 356759-47-2 HCAPLUS  
CN Thiazolium, 3-[2-(3-hydroxyphenyl)-2-oxoethyl]-4,5-dimethyl-, bromide  
(9CI) (CA INDEX NAME)

● Br<sup>-</sup>

RN 356759-48-3 HCAPLUS  
 CN Thiazolium, 5-(hydroxymethyl)-4-methyl-3-(2-oxo-2-phenylethyl)-, chloride  
 (9CI) (CA INDEX NAME)

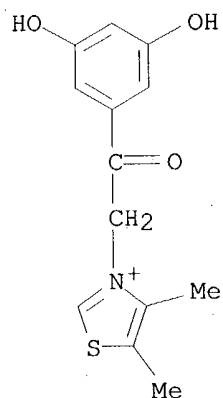
● Cl<sup>-</sup>

RN 356759-50-7 HCAPLUS  
 CN Thiazolium, 3-[2-(2,4-dihydroxyphenyl)-2-oxoethyl]-4,5-dimethyl-, bromide  
 (9CI) (CA INDEX NAME)



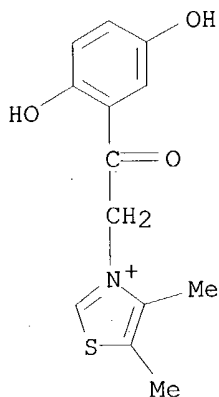
● Br<sup>-</sup>

RN 356759-52-9 HCAPLUS  
CN Thiazolium, 3-[2-(3,5-dihydroxyphenyl)-2-oxoethyl]-4,5-dimethyl-, bromide  
(9CI) (CA INDEX NAME)

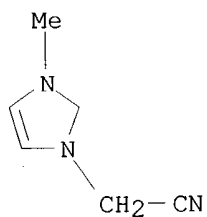


● Br<sup>-</sup>

RN 356759-53-0 HCAPLUS  
CN Thiazolium, 3-[2-(2,5-dihydroxyphenyl)-2-oxoethyl]-4,5-dimethyl-, bromide  
(9CI) (CA INDEX NAME)

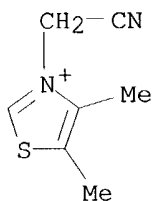
● Br<sup>-</sup>

RN 392710-36-0 HCAPLUS  
 CN 1H-Imidazolium, 1-(cyanomethyl)-3-methyl-, bromide (9CI) (CA INDEX NAME)

● Br<sup>-</sup>

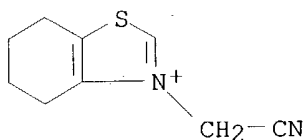
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

RN 392710-37-1 HCAPLUS  
 CN Thiazolium, 3-(cyanomethyl)-4,5-dimethyl-, bromide (9CI) (CA INDEX NAME)

● Br<sup>-</sup>

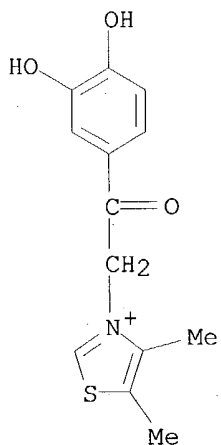
RN 392710-38-2 HCAPLUS

CN Benzothiazolium, 3-(cyanomethyl)-4,5,6,7-tetrahydro-, bromide (9CI) (CA INDEX NAME)



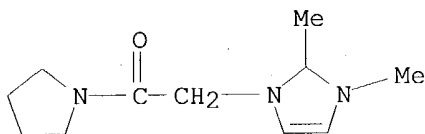
● Br<sup>-</sup>

RN 393121-65-8 HCAPLUS  
CN Thiazolium, 3-[2-(3,4-dihydroxyphenyl)-2-oxoethyl]-4,5-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 393121-77-2 HCAPLUS  
CN 1H-Imidazolium, 1,2-dimethyl-3-[2-oxo-2-(1-pyrrolidinyl)ethyl]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

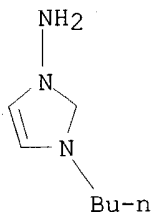
RN 393121-80-7 HCAPLUS

CN 1H-Imidazolium, 1-amino-3-butyl-, salt with 2,4,6-trimethylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 401514-28-1

CMF C7 H14 N3

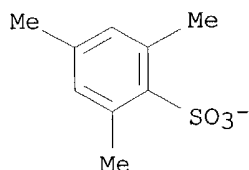


\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 46149-61-5

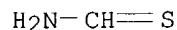
CMF C9 H11 O3 S



IT 115-08-2P, Thioformamide 1674-30-2P,  
2-Chloro-1-phenylethanol 1977-06-6P, 4-Methyl-5-  
(hydroxymethyl)thiazole 2491-36-3P 2491-37-4P  
2491-38-5P 2491-39-6P 4433-49-2P  
20266-00-6P, N-(Chloroacetyl)pyrrolidine 20582-55-2P,  
4-Methyl-5-(ethoxycarbonyl)thiazole 25015-91-2P  
56751-12-3P 62932-92-7P 70111-05-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(intermediate; synthesis of thiazolium and imidazolium salts as  
**antiglaucoma** agents)

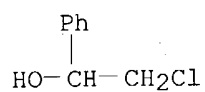
RN 115-08-2 HCAPLUS

CN Methanethioamide (9CI) (CA INDEX NAME)

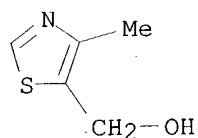


RN 1674-30-2 HCAPLUS

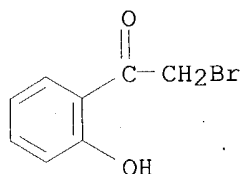
CN Benzenemethanol,  $\alpha$ -(chloromethyl)- (9CI) (CA INDEX NAME)



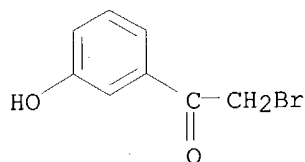
RN 1977-06-6 HCAPLUS  
CN 5-Thiazolemethanol, 4-methyl- (8CI, 9CI) (CA INDEX NAME)



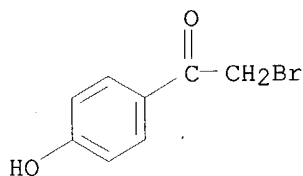
RN 2491-36-3 HCAPLUS  
CN Ethanone, 2-bromo-1-(2-hydroxyphenyl)- (9CI) (CA INDEX NAME)



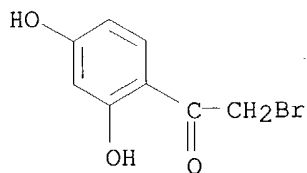
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CN Ethanone, 2-bromo-1-(3-hydroxyphenyl)- (9CI) (CA INDEX NAME)



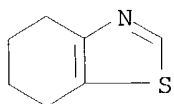
RN 2491-38-5 HCAPLUS  
CN Ethanone, 2-bromo-1-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



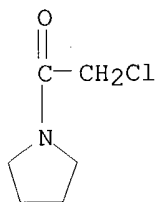
RN 2491-39-6 HCAPLUS  
CN Ethanone, 2-bromo-1-(2,4-dihydroxyphenyl)- (9CI) (CA INDEX NAME)



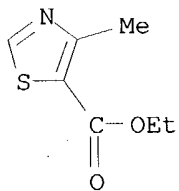
RN 4433-49-2 HCAPLUS  
 CN Benzothiazole, 4,5,6,7-tetrahydro- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



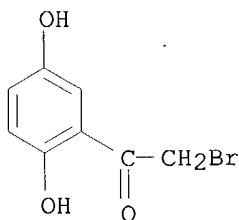
RN 20266-00-6 HCAPLUS  
 CN Pyrrolidine, 1-(chloroacetyl)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 20582-55-2 HCAPLUS  
 CN 5-Thiazolecarboxylic acid, 4-methyl-, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



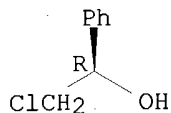
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 CN Ethanone, 2-bromo-1-(2,5-dihydroxyphenyl)- (9CI) (CA INDEX NAME)



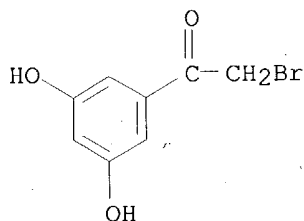


RN 56751-12-3 HCAPLUS  
 CN Benzenemethanol,  $\alpha$ -(chloromethyl)-, ( $\alpha$ R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

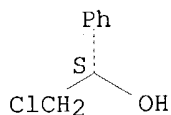


RN 62932-92-7 HCAPLUS  
 CN Ethanone, 2-bromo-1-(3,5-dihydroxyphenyl)- (9CI) (CA INDEX NAME)



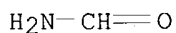
RN 70111-05-6 HCAPLUS  
 CN Benzenemethanol,  $\alpha$ -(chloromethyl)-, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



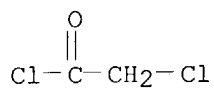
IT 75-12-7, Formamide, reactions 79-04-9, Chloroacetyl chloride 89-84-9 99-40-1 99-93-4, 4-Hydroxyphenylethanone 118-93-4, 2-Hydroxyphenylethanone 121-71-1, 3-Hydroxyphenylethanone 123-75-1, Pyrrolidine, reactions 490-78-8 532-27-4, 2-Chloroacetophenone 590-17-0, Bromoacetonitrile 609-15-4, Ethyl 2-chloroacetoacetate 616-47-7, 1-Methylimidazole 822-87-7, 2-Chlorocyclohexan-1-one 1739-84-0, 1,2-Dimethylimidazole 3581-91-7, 4,5-Dimethylthiazole 4316-42-1, 1-Butylimidazole 36016-40-7, O-Mesitylene sulfonylhydroxylamine 51863-60-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant; synthesis of thiazolium and imidazolium salts as **antiglaucoma** agents)

RN 75-12-7 HCAPLUS  
 CN Formamide (8CI, 9CI) (CA INDEX NAME)



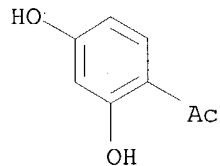
RN 79-04-9 HCAPLUS

CN Acetyl chloride, chloro- (6CI, 8CI, 9CI) (CA INDEX NAME)



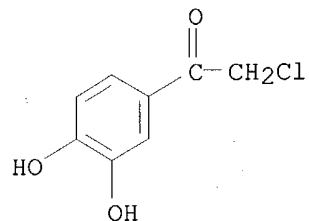
RN 89-84-9 HCAPLUS

CN Ethanone, 1-(2,4-dihydroxyphenyl)- (9CI) (CA INDEX NAME)



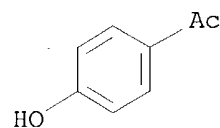
RN 99-40-1 HCAPLUS

CN Ethanone, 2-chloro-1-(3,4-dihydroxyphenyl)- (9CI) (CA INDEX NAME)



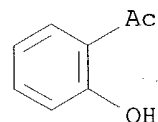
RN 99-93-4 HCAPLUS

CN Ethanone, 1-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



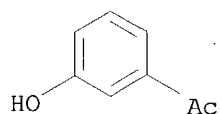
RN 118-93-4 HCAPLUS

CN Ethanone, 1-(2-hydroxyphenyl)- (9CI) (CA INDEX NAME)

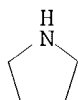


RN 121-71-1 HCAPLUS

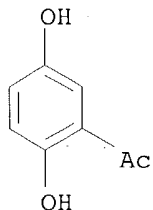
CN Ethanone, 1-(3-hydroxyphenyl)- (9CI) (CA INDEX NAME)



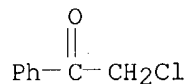
RN 123-75-1 HCAPLUS  
 CN Pyrrolidine (8CI, 9CI) (CA INDEX NAME)



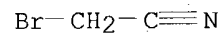
RN 490-78-8 HCAPLUS  
 CN Ethanone, 1-(2,5-dihydroxyphenyl)- (9CI) (CA INDEX NAME)



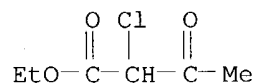
RN 532-27-4 HCAPLUS  
 CN Ethanone, 2-chloro-1-phenyl- (9CI) (CA INDEX NAME)



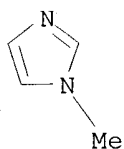
RN 590-17-0 HCAPLUS  
 CN Acetonitrile, bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



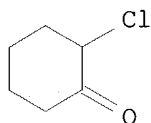
RN 609-15-4 HCAPLUS  
 CN Butanoic acid, 2-chloro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



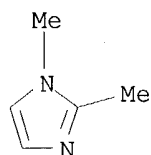
RN 616-47-7 HCAPLUS  
 CN 1H-Imidazole, 1-methyl- (9CI) (CA INDEX NAME)



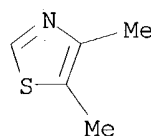
RN 822-87-7 HCAPLUS  
CN Cyclohexanone, 2-chloro- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



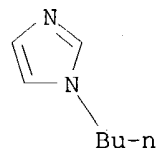
RN 1739-84-0 HCAPLUS  
CN 1H-Imidazole, 1,2-dimethyl- (9CI) (CA INDEX NAME)



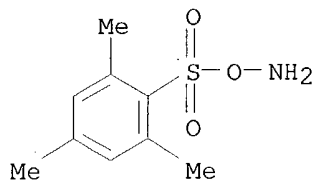
RN 3581-91-7 HCAPLUS  
CN Thiazole, 4,5-dimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



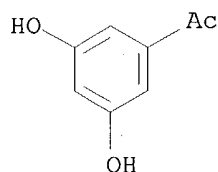
RN 4316-42-1 HCAPLUS  
CN 1H-Imidazole, 1-butyl- (9CI) (CA INDEX NAME)



RN 36016-40-7 HCAPLUS  
CN Hydroxylamine, O-[(2,4,6-trimethylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 51863-60-6 HCAPLUS  
 CN Ethanone, 1-(3,5-dihydroxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:521487 HCAPLUS

DOCUMENT NUMBER: 137:93743

TITLE: Preparation of thiazole derivatives as  
**antiglaucoma** agents

INVENTOR(S): **Wagle, Dilip; Gall, Martin;**  
**Bell, Stanley C.; Lavoie, Edmond J.**

PATENT ASSIGNEE(S): Alteon, Inc., USA

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

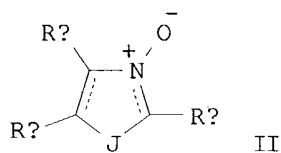
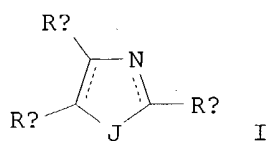
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002053156	A1	20020711	WO 2001-US49834	20011228
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1359910	A1	20031112	EP 2001-988373	20011228
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2002119970	A1	20020829	US 2001-36856	20011231
PRIORITY APPLN. INFO.:				
			US 2000-259428P	P 20001229
			US 2001-296258P	P 20010606
			WO 2001-US49834	W 20011228
OTHER SOURCE(S): MARPAT 137:93743				

GI



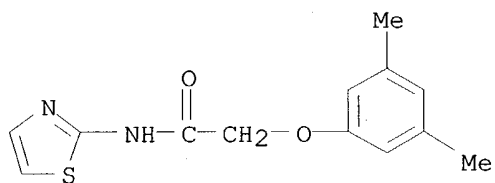
AB Provided is a method of decreasing intraocular pressure or improving ocular accommodation, comprising administration of I, II [J = O, S, NR'; Ra-b = H, acylamino, acyloxyalkyl, alkanoyl, alkenyl, alkoxy, etc.; R' = alkyl, alkenyl, H, Ar; Rc = oxo, H, alkyl, alkylthio, H, mercapto, amino, amino-alkyl, etc.]. For instance, 3,5-dimethylphenol was alkylated with bromoacetic acid (110°, 4 h) to yield (3,5-dimethylphenoxy)acetic acid which was coupled to 2-aminothiazole (CH<sub>2</sub>Cl<sub>2</sub>, EDCI, HOBT, NMM) to give 2-(3,5-Dimethylphenoxy)-N-(thiazol-2-yl)acetamide. The activity of example compds. in breaking, reversing or inhibiting the formation of advanced glycosylation end products (AGEs) or AGE-mediated cross-links was determined (no data).

IT **302559-76-8P**, 2-(3,5-Dimethylphenoxy)-N-(thiazol-2-yl)acetamide  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(**antiglaucoma** agent; preparation of thiazole derivs. as **antiglaucoma** agents)

RN 302559-76-8 HCAPLUS

CN Acetamide, 2-(3,5-dimethylphenoxy)-N-2-thiazolyl- (9CI) (CA INDEX NAME)



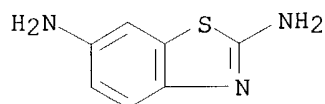
IT **181070-25-7P**, 2,6-Diaminobenzothiazole dihydrochloride  
**289491-05-0P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(**antiglaucoma** agents; preparation of thiazole derivs. as **antiglaucoma** agents)

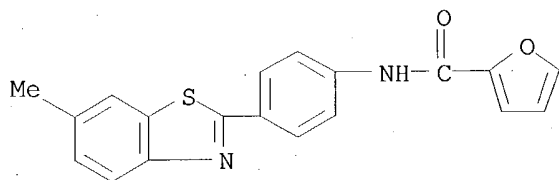
RN 181070-25-7 HCAPLUS

CN 2,6-Benzothiazolediamine, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 289491-05-0 HCAPLUS  
CN 2-Furancarboxamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



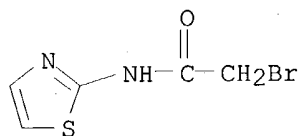
IT 9001-03-0, Carbonic anhydrase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitor; preparation of thiazole derivs. as **antiglaucoma**  
agents)

RN 9001-03-0 HCAPLUS  
CN Dehydratase, carbonate (9CI) (CA INDEX NAME)

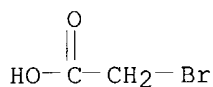
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 73326-20-2P, 2-(2-Bromoacetamido)thiazole  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(intermediate; preparation of thiazole derivs. as **antiglaucoma**  
agents)

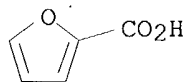
RN 73326-20-2 HCAPLUS  
CN Acetamide, 2-bromo-N-2-thiazolyl- (9CI) (CA INDEX NAME)



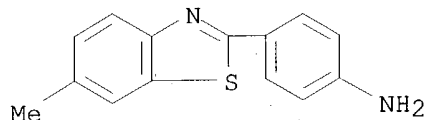
IT 79-08-3, Bromoacetic acid 88-14-2, 2-Furoic acid  
92-36-4, 2-(4-Aminophenyl)-6-methylbenzothiazole 96-50-4  
, 2-Aminothiazole 108-68-9, 3,5-Dimethylphenol 527-69-5  
, 2-Furoyl chloride 598-21-0, Bromoacetyl bromide  
6285-57-0, 2-Amino-6-nitrobenzothiazole  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reactant; preparation of thiazole derivs. as **antiglaucoma** agents)  
RN 79-08-3 HCAPLUS  
CN Acetic acid, bromo- (8CI, 9CI) (CA INDEX NAME)



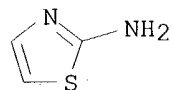
RN 88-14-2 HCAPLUS  
CN 2-Furancarboxylic acid (9CI) (CA INDEX NAME)



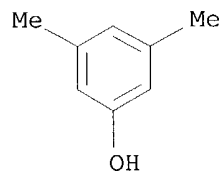
RN 92-36-4 HCAPLUS  
CN Benzenamine, 4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



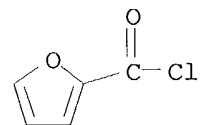
RN 96-50-4 HCAPLUS  
CN 2-Thiazolamine (9CI) (CA INDEX NAME)



RN 108-68-9 HCAPLUS  
CN Phenol, 3,5-dimethyl- (9CI) (CA INDEX NAME)

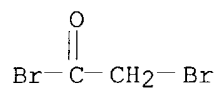


RN 527-69-5 HCAPLUS  
CN 2-Furancarbonyl chloride (9CI) (CA INDEX NAME)



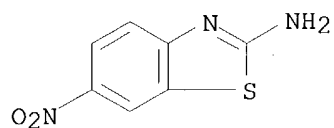
RN 598-21-0 HCAPLUS  
CN Acetyl bromide, bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)





RN 6285-57-0 HCAPLUS

CN 2-Benzothiazolamine, 6-nitro- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=&gt;

-C.tplbond.CRE, -CH<sub>2</sub>-C.tplbond.CRP, aryl, arylalkyl, or aroylalkyl; R<sub>1</sub> and R<sub>2</sub> are independently hydrogen, alkyl or hydroxymethyl; R<sub>3</sub> is H or -CH<sub>3</sub>; R<sub>4</sub> is acetamido, hydrogen, Me, amino, -C.tplbond.CRE, -CH<sub>2</sub>-C.tplbond.CRP, alkylthio, fluoromethyl, etc.; X- is a pharmaceutically acceptable anion.

ACCESSION NUMBER: 2002:927189 HCAPLUS  
 DOCUMENT NUMBER: 138:11441  
 TITLE: Method for treating fibrotic diseases or other indications  
 INVENTOR(S): Gall, Martin  
 PATENT ASSIGNEE(S): Alteon, Inc., USA  
 SOURCE: PCT Int. Appl., 37 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002096362	A2	20021205	WO 2002-US16846	20020530
WO 2002096362	A3	20030522		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003004194	A1	20030102	US 2002-158344	20020530
US 6596745	B2	20030722		
EP 1404339	A2	20040407	EP 2002-739481	20020530
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			US 2001-294438P	P 20010530
			WO 2002-US16846	W 20020530

OTHER SOURCE(S): MARPAT 138:11441

IT **Eye**, disease  
 (retinopathy; method for treating fibrotic diseases or other indications)

IT 477252-66-7P 477252-67-8P 477252-68-9P 477252-69-0P  
**477252-70-3P 477252-71-4P 477252-72-5P**  
**477252-73-6P** 477252-74-7P 477252-75-8P 477252-76-9P  
 477252-77-0P 477252-78-1P 477252-79-2P 477252-80-5P  
**477252-81-6P 477252-82-7P 477252-83-8P**  
**477252-84-9P** 477252-85-0P 477252-86-1P 477252-87-2DP,  
 derivs.

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(method for treating fibrotic diseases or other indications)

IT **477252-70-3P 477252-71-4P 477252-72-5P**  
**477252-73-6P 477252-81-6P 477252-82-7P**  
**477252-83-8P 477252-84-9P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES